

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
September 2003**

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during September was excessive for the fourth consecutive month. The maximum daily mean discharge of 34,000 cfs occurred on September 5. The minimum daily mean discharge was 2,070 cfs on September 1.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 12,720 cfs, which is 638 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 14,240 cfs, or 1,167 percent of median (water years 1961-90). **Observed and adjusted monthly mean streamflows for September, 2003 were the highest of record for the month.**

On the basis of an 11-station average, precipitation during September was 10.39 inches, which is 268 percent of the 62-year average. **Precipitation for the month of September, 2003 was the highest of record for the month.** The maximum daily-average precipitation during the month was 3.18 inches on September 2. Precipitation in the upper Delaware River Basin during the past 12 months was 12.23 inches more than the long-term average. Precipitation during September was 6.51 inches more than the long-term average for the month.

Combined storage October 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 101 percent of capacity above the point of maximum depletion. The combined storage of 274 billion gallons was 12 billion gallons more than that of one month ago and 138 billion gallons more than that of one year ago. **Combined storage on October 1, 2003, was the highest of record for the first day of October.** Median storage on the first day of October in 36 years of record is 174 billion gallons. Pepacton, Cannonsville and Neversink Reservoirs spilled 16, 13 and 0.6 billion gallons, respectively, in September.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during September were above average in all of the wells. Water levels in 7 of the wells were below August 2003 levels, and water levels in all of the wells were above September 2002 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Sept. 2002		October 2002 to September 2003					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Oct.	3.35	43.13	6.30	55.36	188	128	+2.95	+12.23
Nov.	3.79	39.78	3.96	49.06	104	123	+.17	+9.28
Dec.	3.35	35.99	4.66	45.10	139	125	+1.31	+9.11
Jan.	2.98	32.64	2.64	40.44	89	124	-.34	+7.80
Feb.	2.63	29.66	2.59	37.80	98	127	-.04	+8.14
Mar.	3.36	27.03	3.00	35.21	89	130	-.36	+8.18
Apr.	3.74	23.67	2.63	32.21	70	136	-1.11	+8.54
May	4.22	19.93	3.57	29.58	85	148	-.65	+9.65
June	3.99	15.71	6.87	26.01	172	166	+2.88	+10.30
July	4.02	11.72	3.95	19.14	98	163	-.07	+7.42
Aug.	3.82	7.70	4.80	15.19	126	197	+.98	+7.49
Sept.	3.88	3.88	10.39	10.39	268	268	+6.51	+6.51

Note: Amount shown in cumulative columns is total from month shown to present.

STREAMFLOW, IN CFS

DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2002			2003 Monthly mean	Percent of median
	Maximum	Median	Minimum		
September (observed)	9,167 (1960)	1,994	892 (1941)	12,720	638
September (adjusted)	10,720 (1960)	1,428	324 (1964)	14,240	997
October (observed)	15,690 (1955)	2,348	807 (1941)		
October (adjusted)	18,570 (1955)	2,147	322 (1964)		